

Accelerating a way of working culture change using Polarion

Matias Bejar

Engineering planner, Medium Bore Platform

FOUNDED IN 1834

GLOBAL LEADER

in sustainable solutions for the marine and energy markets

2018

Turnover

5 174 MEUR

Operating result

543 MEUR

Order intake

6 307 MEUR

Operations in

200 LOCATIONS

Our personnel

APPROX. 19 000

Nationalities

138

ENERGY BUSINESS

Wärtsilä Energy Business is leading the transition towards a 100% renewable energy future. As an Energy System Integrator, we understand, design, build and serve optimal power systems for future generations.

Wärtsilä's solutions provide the needed flexibility to integrate renewables and secure power system reliability. Our offering comprises engine-based flexible power plants – including liquid gas systems – hybrid solar power plants, energy management systems and storage and integration solutions.

We support our customers over the lifecycle of their installations with services that enable increased efficiency and guaranteed performance. Wärtsilä has 70 GW of installed power plant capacity in 177 countries around the world.

TOWARDS A 100% RENEWABLE ENERGY FUTURE

The energy landscape is in transition towards more flexible and sustainable energy systems. We envision a 100% renewable energy future.

Wärtsilä is leading the transition as the Energy System Integrator – we understand, design, build and serve optimal power systems for future generations.

Engines and storage will provide the needed flexibility to integrate renewables and secure reliability.

We develop and deliver solutions and services to help our customers maximize performance and profitability throughout the asset lifecycle.

MARINE BUSINESS

In the maritime and oil & gas industries, no other company has a broader offering of technologically advanced, environmentally sustainable, and economically sound solutions. With an integrated product portfolio comprising full lifecycle solutions, **we are leading the industry's transformation** towards a highly connected Smart Marine Ecosystem.

TOWARDS A SMART MARINE ECOSYSTEM

We are leading the industry's transformation towards a Smart Marine Ecosystem, whereby **real-time communication** and the **digitalisation** of all aspects of shipping and port operations, including the entire logistics chain, are utilised to **create long-term value** for our customers and partners.

By applying smart technology and performance optimisation services, **we deliver higher safety, greater efficiencies and minimised climate impact.** This will result in more sustainable, safe, and profitable operations for ship owners and operators around the world.

SMART TECHNOLOGY OFFERING COVERS ALL MARKET SEGMENTS

MERCHANT VESSELS

GAS CARRIERS

CRUISE & FERRY

NAVY

SPECIAL VESSELS

OIL & GAS INDUSTRY

THE WORLD'S WIDEST PRODUCT AND SOLUTIONS PORTFOLIO AND THE MOST EXTENSIVE SERVICE NETWORK

- Power supply
- Power conversion
- Propulsion
- Exhaust treatment
- Parts solutions
- Maintenance and repair services
- Lifecycle solutions
- Automation, navigation & communication
- Simulation & training solutions
- Fleet operations solutions
- Ship traffic control solutions
- Special products
- Entertainment systems
- Water & waste
- Gas solutions for marine and land-based applications

TASK MANAGEMENT IN MPS RDE

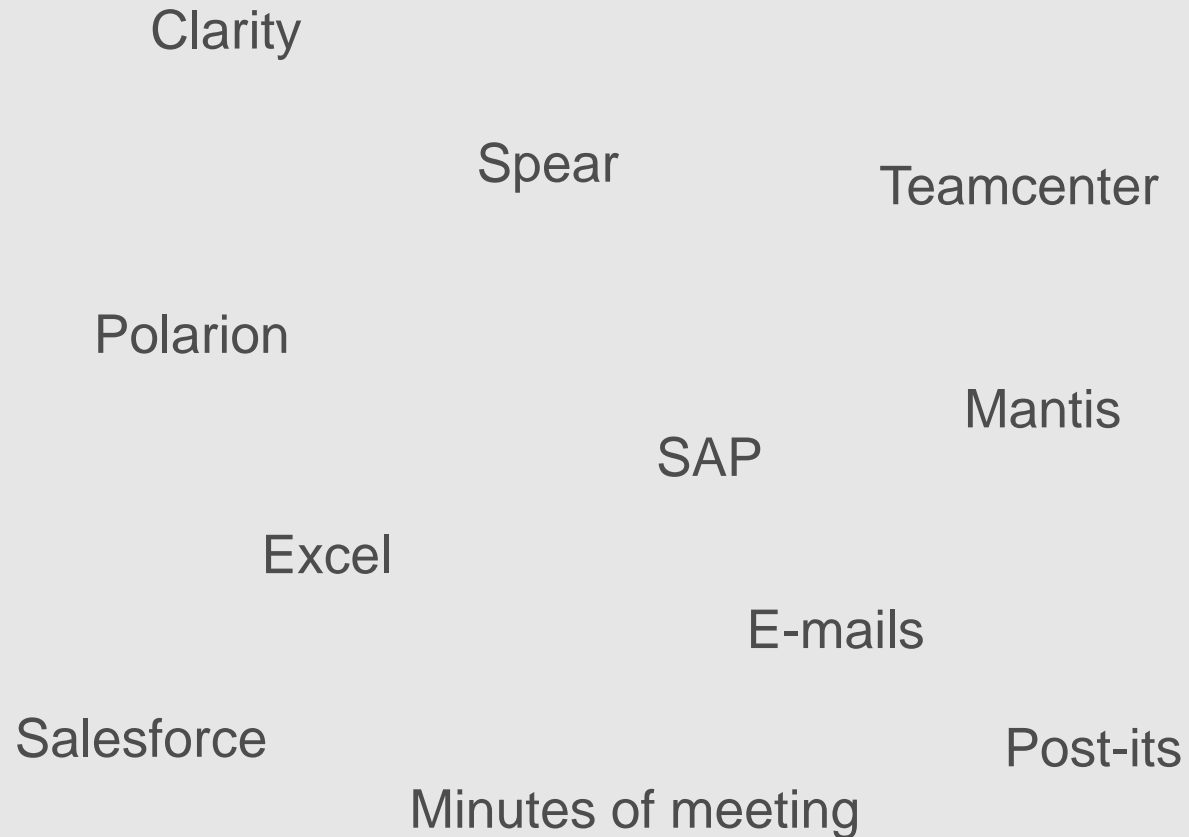
Marine Power Solutions Research & Development and Engineering

- Develops and manages the Engines and Propulsion product portfolio
 - Mechanical design
 - Simulations
 - Performance
 - Automation
 - Testing
 - Engine expertise



Situation when we started














- Tasks in multiple tools across RDE
- Impossible to get an overall view of tasks and their statuses
- Difficult to prioritise
- Change management is impossible



Polarion work item setup

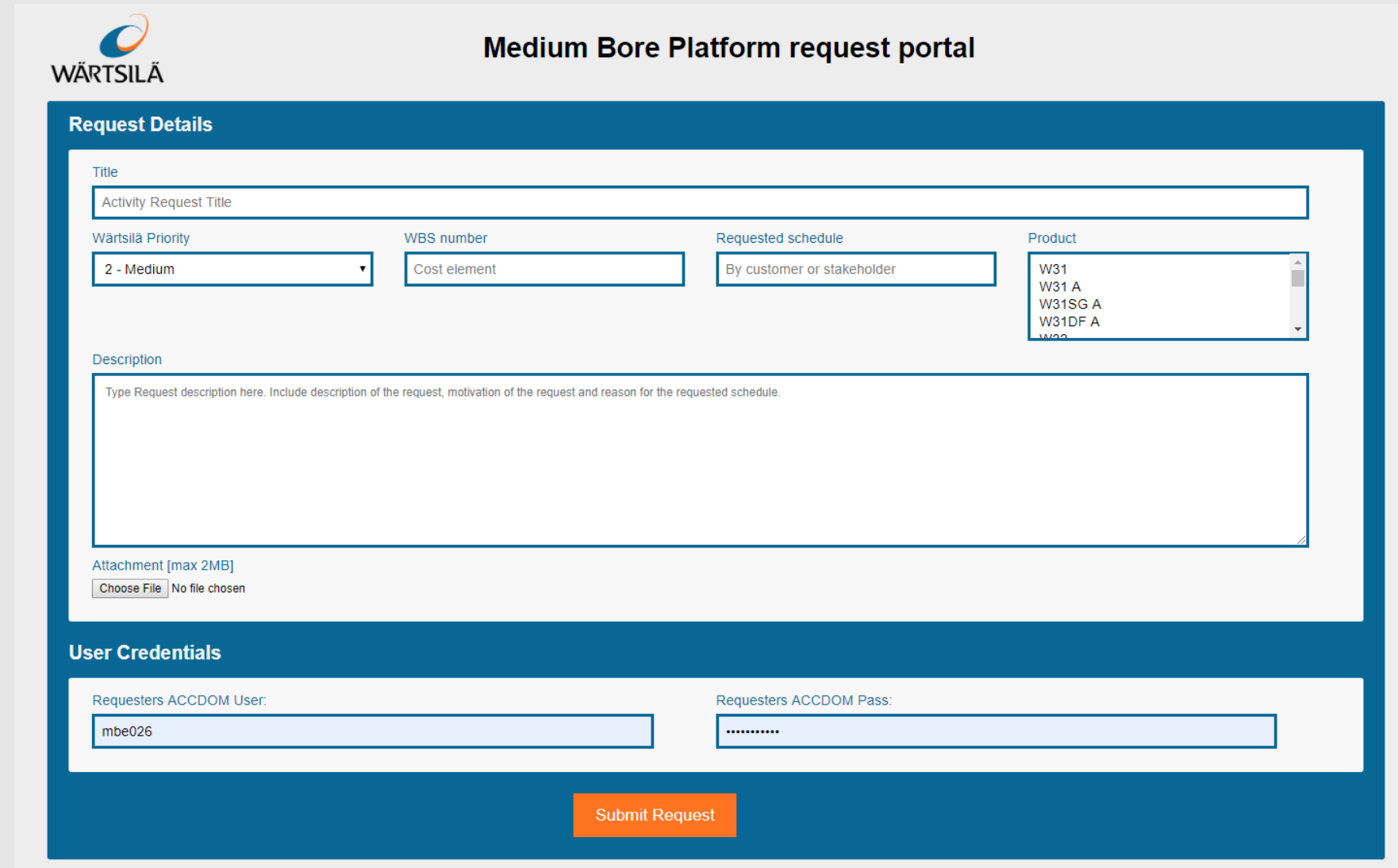
- 4 different work item types
 - Work package
 - Activity request
 - Activity
 - Task

- Order intake
- Prioritisation
- Work breakdown
- Planning
- Follow up

↔ <input type="checkbox"/>	▼  TRAI_train-4	not real case, a WP just for testing new functionalities	 In Progress	Beijar, Matias	Honkela, Vesa
↔ <input type="checkbox"/>	▼  DSBTrain-36	Work package 2 Activity request 2	 In Progress	Beijar, Matias	Mäki, Janne
↔ <input type="checkbox"/>	▼  DMSBTrain-416	Work package 2 Activity request 2 Activity 2	 In Progress	Beijar, Matias	
↔ <input type="checkbox"/>	<input checked="" type="checkbox"/> DMSBTrain-417	Work package 2 Activity request 2 Activity 2	 In Progress	Beijar, Matias	Mangano, Paolo
↔ <input type="checkbox"/>	▼  BPC-1409	not real case : test on 3 layers / 2 layers mixing	 In Progress	Mangano, Paolo	Mangano, Paolo
↔ <input type="checkbox"/>	<input checked="" type="checkbox"/> BPC-1412	not real case : Ta2L x test on 3 layers / 2 layers mixing	 In Progress	Mangano, Paolo	Mangano, Paolo
↔ <input type="checkbox"/>	▼  BPC-1410	not real case : Ac x test on 3 layers / 2 layers mixing	 Draft	Mangano, Paolo	Mangano, Paolo
↔ <input type="checkbox"/>	<input checked="" type="checkbox"/> BPC-1411	not real case : Ta3L x test on 3 layers / 2 layers mixing	 In Progress	Mangano, Paolo	Mangano, Paolo

Request portals

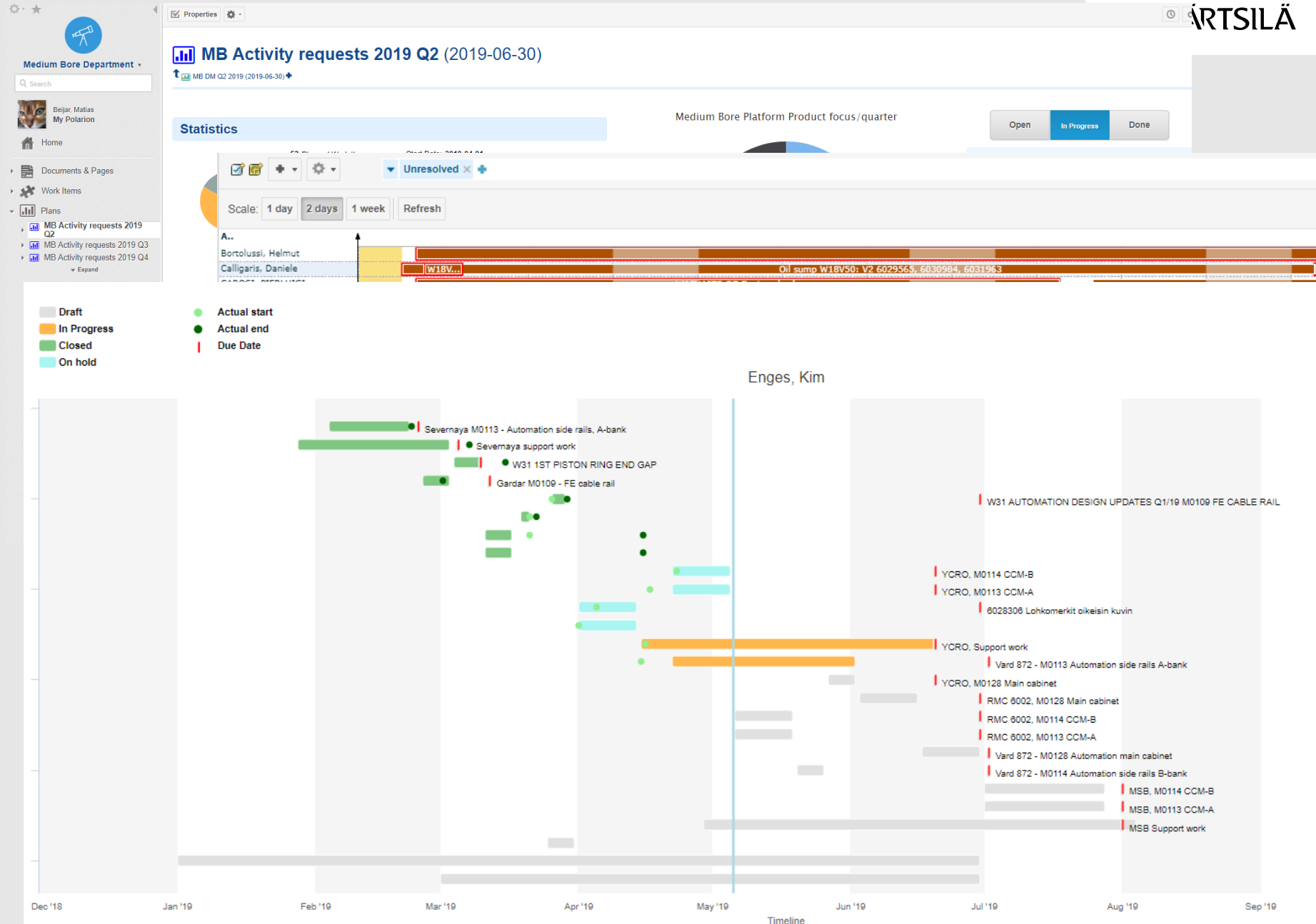
- PHP pages for submitting Activity requests to Polarion
- No Polarion login required



The screenshot shows the 'Medium Bore Platform request portal' interface. It features a blue header with the Wärtsilä logo and the title 'Medium Bore Platform request portal'. Below the header is a 'Request Details' section with a white background and a blue border. This section contains several input fields: a text box for 'Title' (containing 'Activity Request Title'), a dropdown for 'Wärtsilä Priority' (set to '2 - Medium'), a text box for 'WBS number' (containing 'Cost element'), a text box for 'Requested schedule' (containing 'By customer or stakeholder'), and a dropdown for 'Product' (with options 'W31', 'W31 A', 'W31SG A', 'W31DF A', and 'W31'). Below these is a large text area for 'Description' with a placeholder text: 'Type Request description here. Include description of the request, motivation of the request and reason for the requested schedule.' Underneath the description is an attachment section with a 'Choose File' button and the text 'No file chosen'. At the bottom of the form is a 'User Credentials' section with two text boxes: 'Requesters ACCDOM User:' (containing 'mbe026') and 'Requesters ACCDOM Pass:' (containing masked characters). A prominent orange 'Submit Request' button is located at the bottom center of the form.

Planning

- Depending on team/organisation
 - Long term plans using Polarion Plans
 - Team planning using Polarion Live plan
 - Gantt charts

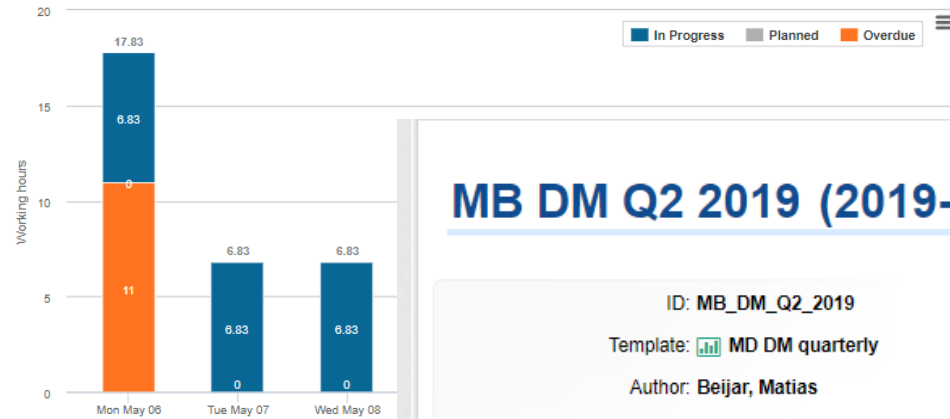


Capacity

- Workload reports
- Polarion plans
- User calendar

Personal Workload Report

Workload Report : Bejar, Matias



Time Scale: **day**

Type: **Tasks**

Y Axis Data: **Working Hours**

Whole project overview: **Yes No**

MB DM Q2 2019 (2019-06-30)

ID: MB_DM_Q2_2019 Status: **In Progress**

Template: **MD DM quarterly** Start Date: **2019-04-01**

Author: **Bejar, Matias** Due Date: **2019-06-30**

Project: **Medium Bore Department** Capacity: **13800.0**

Parent: **Activity_requests_2019_1** Started On: **2019-04-01 07:31**

Report shared from Template: **yes** Finished On:

Description

This plan is used for Design management quarterly plans

Configuration

Project Span: **Design Management Medium Bore** *Calculation Type: **Custom Field Based**

Allowed Types: **Activity** *Estimation Field: **Rough Estimate**

Prioritization Field: **Priority**

Default Estimate:

User Calendar for Bejar, Matias

Regular Schedule

	Start Time	End Time	
<input type="checkbox"/> Sunday			
<input checked="" type="checkbox"/> Monday	08:00	16:00	
<input checked="" type="checkbox"/> Tuesday	08:00	16:00	
<input checked="" type="checkbox"/> Wednesday	08:00	16:00	
<input checked="" type="checkbox"/> Thursday	08:00	16:00	
<input checked="" type="checkbox"/> Friday	08:00	16:00	
<input type="checkbox"/> Saturday			

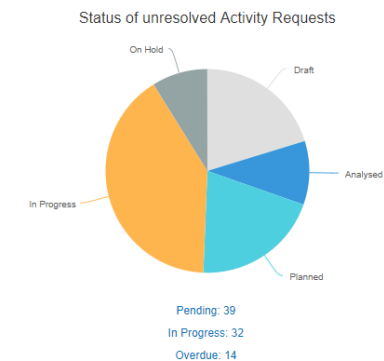
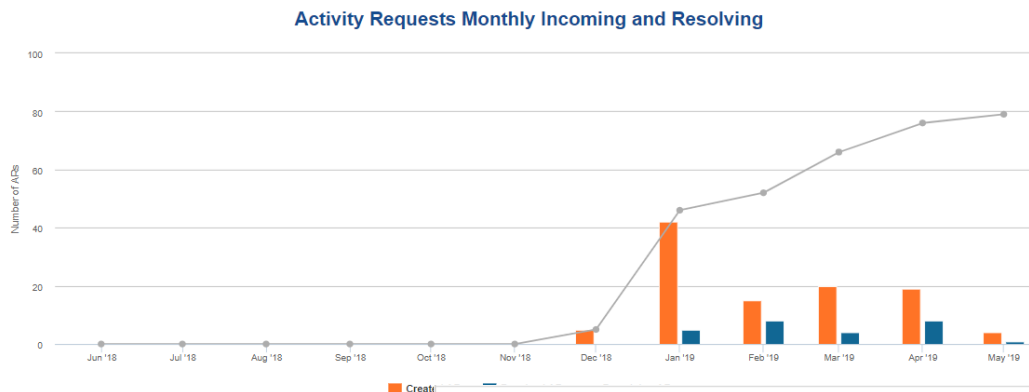
Schedule Exceptions

Title	Type	Date From	Date To	Weekday	Start Time	End Time	Scope
Time off work	Time Off	2018-10-11	2018-10-11	All days			user
Time off	Time Off	2018-11-12	2018-11-12	All days			user
	Time Off			All days			user

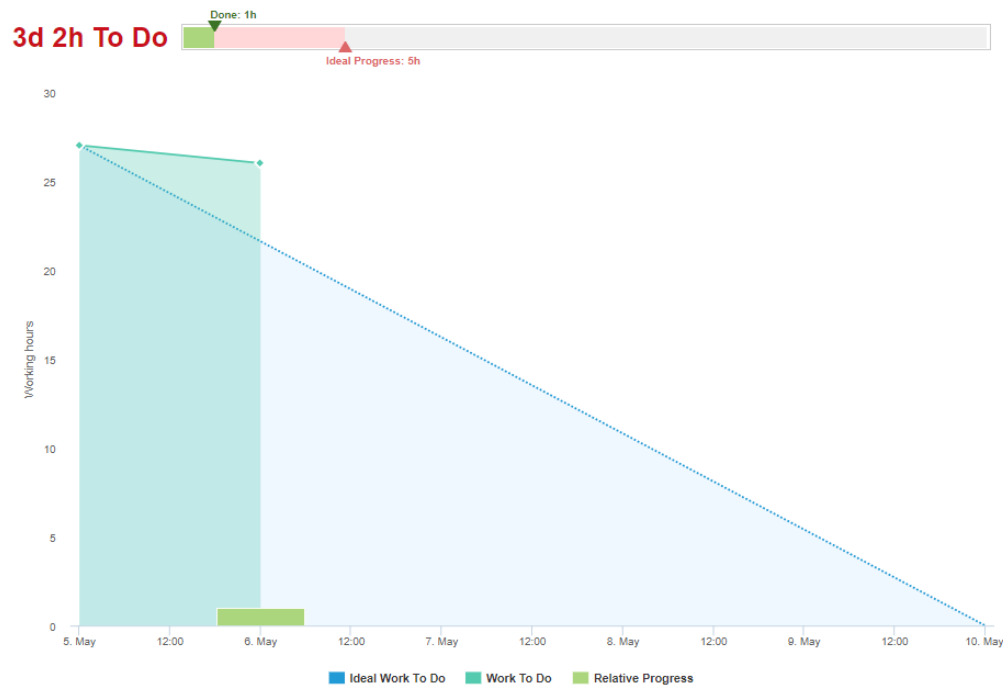
Follow up progress

- Backlogs
- Kanban boards
- Burndown charts

Whole backlog of Medium Bore Department



Plan Status - In Progress

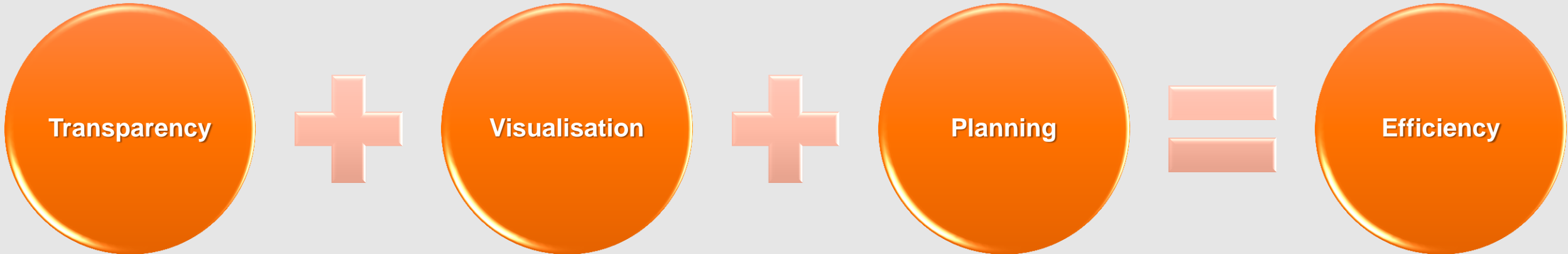


W32/34 PIP and issues (2019-12-31)

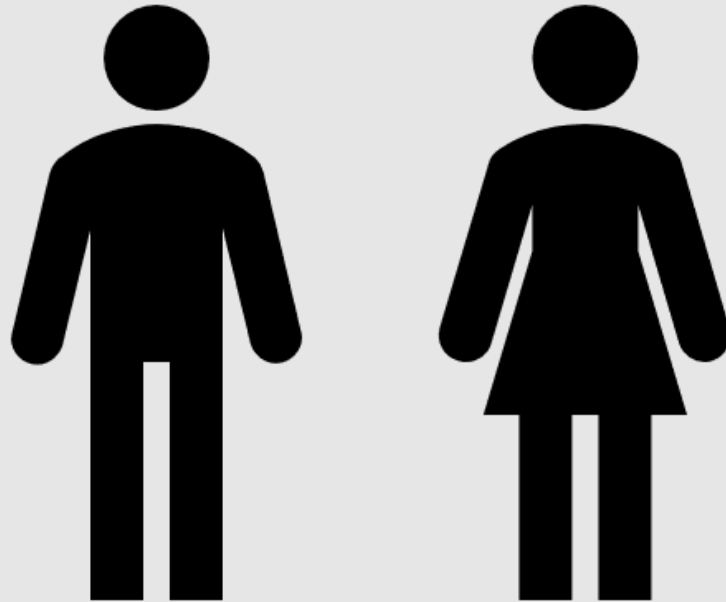
Kanban Board

Prioritize Undone Items | Add Work Items to the Plan | Browse All Planned Items

5 Draft	5 In Progress	4 Closed	4 On Hold
<p>PIP-2150 R3 New lube oil pumps for WL32/34 engines</p> <p>✍️ DMMB-463</p>	<p>Issue-00855 Failing gaskets in starting air system W32E3</p> <p>🔧 DMMB-478</p>	<p>6031232, 6031935 VIC VALVE WL32/34</p> <p>🔧 DMMB-251</p>	<p>PIP-2150 R3 New lube oil suction pipe assembly for W32/34 engines</p> <p>🔧 DMMB-462</p>
<p>OVERSIZE CENTER SLEEVE AND REPAIR DRAWING FOR CYL. HEAD W34DF</p> <p>✍️ DMMB-628</p>	<p>PIP-2195 Cracking cylinder valve covers</p> <p>🔧 DMMB-248</p>	<p>Issue-00901, new design for case "Exhaust bellows failures (Bellow before TC SPN 200081)"</p> <p>🔧 DMMB-601</p>	<p>CRACKED SUCTION PIPE ON W20V32 WET OIL SUMP ISSUE-00753</p> <p>🔧 DMMB-415</p>
<p>ISSUE-00800 CAC DELTA PRESSURE MEASUREMENT ON W32/34 V ENGINES</p> <p>✍️ DMMB-477</p>	<p>PIP-2338 R3 Aluminium profile test parts for W20 V32</p> <p>🔧 DMMB-608</p>	<p>PIP-2144 CRACKING SINGLE WALL MAIN GAS PIPE ON W34SG</p> <p>🔧 DMMB-44</p>	<p>PIP-2039 R3 W32 SIDE COVER SEALS, HOTBOX LEAKAGE MODULE UPDATES FOR W32/34</p> <p>🔧 DMMB-442</p>
<p>Update of fastening holes in air block for W32/W34</p> <p>✍️ DMMB-642</p>	<p>Knock sensor with flying lead replacement for W34 module updates</p> <p>🔧 DMMB-491</p>	<p>PIP-2324 R3 Additional bracket for Spiro vent</p> <p>🔧 DMMB-724</p>	<p>PIP-2039 R3 W32 SIDE COVER SEALS, HOTBOX LEAKAGE MODULE UPDATES FOR WL32/34</p> <p>🔧 DMMB-441</p>
<p>PIP-2142 R4 V-ring problem</p> <p>✍️ DMMB-629</p>	<p>Issue-00855 Failing gaskets in starting air system W32E3 - Field update kit for delivered W32E3/E</p> <p>🔧 DMMB-489</p>		



The most important part of way of working changes





WÄRTSILÄ